SPOIL DISPOSAL RECOMMENDATIONS FOR PROPOSED DREDGING AND FILL BY SEA-DADE CORPORATION IN LOWER BISCAYNE BAY, DADE COUNTY, FLORIDA

by

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This study in behalf of marine conservation has been made at the request of Mr. Van H. Ferguson, Director, Internal Improvement Fund.

A map has been prepared to show the scope of the proposed Sea-Dade Corporation dredging and fill project and the site recommended for spoil disposal from sections "A" and "B" including Featherbed Bank. Section cuts are delineated to complement this text. Verifaxed copies of development sketches prepared by M. B. Garris, Civil and Consulting Engineer, Miami, Florida for the Sea-Dade Corporation also have been included in this report for ready reference.

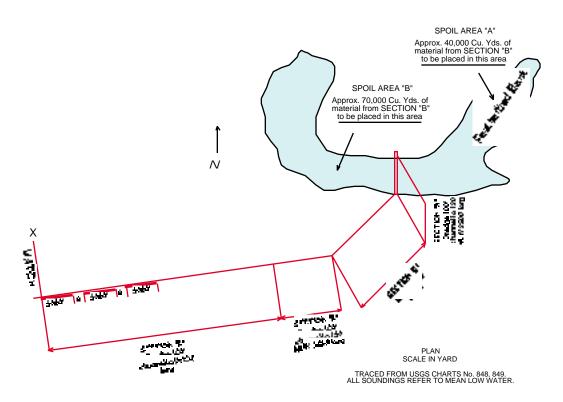
Sections "A", "B" and "C" are involved in cutting an access channel for a large hydraulic dredge to reach borrow pit "D" where 1,000,000 cubic yards of spoil for mainland deposition are to be obtained in the initial stages of this project. A future permit for added dredging is proposed as an extension of borrow pit "D" (see verifaxed sheet 2).

Featherbed Bank, an intervening deeper water area and a shoal area lying between the Dade County mainland and an irregular one fathom line running two to three miles offshore will be affected by development plans in this section of Biscayne Bay. Attached marine grass growth and abundance decreases from Featherbed Bank and the Atlantic barrier islands westward to the mainland. This westward decline of grasses has been noted in other Florida east coast sounds and lagoons. It apparently is the result of prevailing southeasterly winds during the growing season that result in increased wave action and turbidity away from the lee of existing barrier islands.

Featherbed Bank is densely vegetated by turtle grass. Red and green algae are also very abundant. Fish, shrimp and other marine animals abound in this grassy habitat where the intracoastal Waterway channel would be widened and deepened under existing dredging plans. This is one of the most productive marine habitats left in Biscayne Bay since dredging and filling projects northward in metropolitan Dade County have obliterated many former nursery, breeding and feeding grounds. It should be preserved. Originally spoil was slated to be put on Featherbed Bank. Since then representatives of Sea-Dade Corporation have stated verbally that this would not be done according Mr. Robert. M. Ingle, Director of Research, Florida State Board of Conservation.

As shown an the prepared map, it is recommended that spoil from dredging in Featherbed Bank and deeper water between the bank and the mainland shoal be spread in section "C" adjacent to the already designated open water spoil areas because:

- (1) damage to Featherbed Bank would be minimized
- (2) spoil would be safety removed from the path of Intracoastal Waterway traffic
- (3) spoil would be deposited in one of the least productive sections of the deeper water area
- (4) it would be easy to locate the spoil for future study
- (5) raising the bottom might increase attached grass growth by exposing any colonizing plants to increased sunlight.



SKETCH TO ACCOMPANY APPLICATION TO DREDGE CHANNEL AND BURROW PIT AND DEPOSIT SPOUL IN BISCAYNE BAY DADE COUNTY FLORIDA

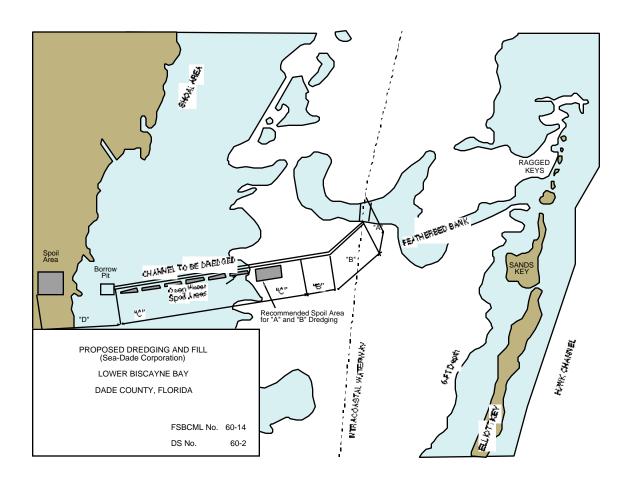
APPLICATIONS BY SEA-DADE CORPORATION

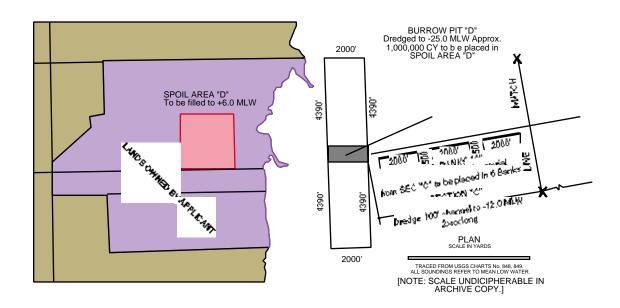
M. B. GARRIS MIAMI, FLA. CIVIL CONSULTING ENG. OCTOBER 1959

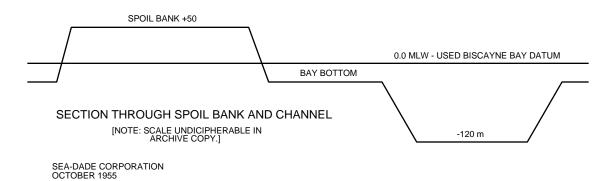
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SCALE AS SHOWN

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